Title (en)

ARTIFICIAL INTELLIGENCE ROBOT CLEANER, AND ROBOT SYSTEM INCLUDING SAME

Title (de)

REINIGUNGSROBOTER MIT KÜNSTLICHER INTELLIGENZ UND ROBOTERSYSTEM, DAS DIESES EINSCHLIESST

Title (fr)

ROBOT NETTOYEUR DOTÉ D'INTELLIGENCE ARTIFICIELLE ET SYSTÈME ROBOTIQUE COMPRENANT CELUI-CI

Publication

EP 4005454 A4 20230823 (EN)

Application

EP 20847215 A 20200730

Priority

- KR 20190093474 A 20190731
- KR 2020010089 W 20200730

Abstract (en)

[origin: US2021030240A1] A robot cleaner of the present disclosure includes: a robot cleaner including: a main body forming an outer shape; a water tank configured to contain water; a pair of rotary mops configured to rotate in contact with a floor to move the main body; a drive motor configured to rotate the pair of rotary mops; a pump connected to the water tank for injecting the water to the rotary mop; and a controller configured to determine whether the water in the water tank is insufficient based on an output current of the drive motor indicating a water content of the rotary mops. Accordingly, the robot cleaner may be effective in terms of cost and space utilization because it does not have a separate water quantity sensor and can measure the water quantity of the rotary mop of the robot cleaner.

IPC 8 full level

A47L 11/40 (2006.01); **A47L 11/24** (2006.01); **A47L 11/283** (2006.01); **B25J 9/16** (2006.01); **B25J 11/00** (2006.01); **B25J 19/02** (2006.01)

CPC (source: CN EP KR US)

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Citation (search report)

- [A] US 2019038105 A1 20190207 - PARK JEONGSEOP [KR], et al
- [A] US 2014366292 A1 20141218 - JUNG JAE YOUNG [KR], et al
- [A] WO 2006046053 A1 20060504 - RECKITT BENCKISER INC [US], et al
- [A] KR 101974870 B1 20190503
- See also references of WO 2021020917A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 11786098 B2 20231017; **US 2021030240 A1 20210204**; AU 2020321632 A1 20220324; AU 2020321632 B2 20240502; CN 114258278 A 20220329; CN 114258278 B 20230825; EP 4005454 A1 20220601; EP 4005454 A4 20230823; KR 20210015123 A 20210210; TW 202120000 A 20210601; TW I794628 B 20230301; WO 2021020917 A1 20210204

DOCDB simple family (application)

US 202016943539 A 20200730; AU 2020321632 A 20200730; CN 202080058306 A 20200730; EP 20847215 A 20200730; KR 20190093474 A 20190731; KR 2020010089 W 20200730; TW 109125640 A 20200729